

**Louisville Metro Air Pollution Control District**  
**850 Barret Ave., Louisville, Kentucky 40204**  
**06 December 2014**

**Statement of Basis**

**Company:** Coral Graphics Services, Inc.

**Plant Location:** 4700 Commerce Crossings Drive, Louisville, Kentucky 40229

**Date Application Received:** 14 February 2008      **Application Number:** 27867

**Date of Draft Permit:** 06 December 2014

**District Engineer:** Dustin Gohs

**Permit No:** O-1562-14-F

**Plant ID:** 1562

**SIC Code:** 2752

**NAICS:** 323110

**AFS:** 1562

**Introduction:**

This permit will be issued pursuant to District Regulation 2.03, Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits. Its purpose is to provide methods of determining continued compliance with all applicable requirements.

Jefferson County is classified as an attainment area for lead (Pb), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), 1 hr and 8 hr ozone (O<sub>3</sub>), and particulate matter less than 10 microns (PM<sub>10</sub>); and is a non-attainment area for particulate matter less than 2.5 microns (PM<sub>2.5</sub>).

**Application Type/Permit Activity:**

☒ Initial Issuance

☐ Permit Revision

☐ Administrative

☐ Minor

☐ Significant

☐ Permit Renewal

☐ Construction

**Compliance Summary:**

☒ Compliance certification signed

☐ Compliance schedule included

☐ Source is out of compliance

☒ Source is operating in compliance

**I. Source Information**

1. **Plant-wide Product/Process Description:** The source operates lithographic printing presses and UV coaters.
2. **Process Description:** The facility operates lithographic printing presses and UV coaters to produce customs prints for various customers.
3. **Site Determination:** Dynamic Graphic Finishing operates an embossing machine and a foil stamping machine in the same building as Coral Graphics. Both companies are under common control and Dynamic Graphic Finishing processes materials produced by Coral Graphics. However, it has been determined there are no emissions from either the embossing machine or the foil stamping machine.
4. **Emission Unit Summary:**

Emission Unit	Equipment Description
U1	One (1) 4-color Komori sheet-fed offset lithographic press, model LS440P Two (2) 8-color Komori sheet-fed offset lithographic presses, model LS840P One (1) 10-color Komori sheet-fed lithographic press, model 1040P One (1) 8-color Komori sheet-fed lithographic press, model 828 One (1) Steineman UV coater, model GLM102 One (1) Man Roland sheet-fed UV press Two (2) Sakurai UV coaters, model SC102DX One (1) Apollo atmospheric evaporator, rated at 20 gallons/hour, used for reducing waste water disposal One (1) indoor baghouse used to control emissions from the corn starch used as part of the printing operations

5. **Fugitive Sources:** There are no fugitive source emissions at this facility.
6. **Permit Revisions:**

Revision No.	Date of Issuance	Public Notice Date	Type	Emission Unit/Page No.	Description
Initial	xx/xx/2014	12/06/2014	Initial	Entire Permit	Initial Issuance

**7. Plant-wide Emission Summary:**

Pollutant	District calculated Actual Emissions 2008 Data (tpy)	Major Source Status (based on PTE)
CO	0	No
NO <sub>x</sub>	0	No
SO <sub>2</sub>	0	No
PM/PM <sub>10</sub>	2.0	No
VOC	8.25	Yes
Single HAP	0.0021	Yes
Total HAPs	0.0027	Yes

**8. Applicable Requirements:**

☐ PSD      ☐ 40 CFR 60      ☒ SIP  
☐ NSR      ☐ 40 CFR 61      ☒ District-Origin  
                 ☐ 40 CFR 63      ☐ Other

**9. MACT Requirements:** The source has no future MACT requirements.

**10. Referenced Federal Regulations in Permit:** The source is not subject to any federal regulations.

**II. Regulatory Analysis**

**1. Acid Rain Requirements:** The source is not subject to the Acid Rain Program.

**2. Stratospheric Ozone Protection Requirements:** Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

**3. Prevention of Accidental Releases 112(r):** The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.

**4. Basis of Regulation Applicability****a. Plant-wide**

The source is a potential major source for the pollutants VOC, Single HAP Xylene, Single HAP Hexane, and Total HAPs. *Regulation 2.17 – Federally Enforceable District Origin Operating Permits* establishes requirements to limit the plant-wide potential emission rates to below major

source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Regulation 2.17, section 5.1 allows the District to specify operating limits within the permit. Coral Graphics Services, Inc. has been given limits of 15 tons per year for criteria pollutants, 10 tons per year for total HAPs, and 5 tons per year for individual HAPs. By accepting these limits, the source is exempt from the STAR program.

Regulation 2.17, section 5.2 requires monitoring and record keeping ensuring compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the District upon request.

Regulation 2.17, section 2 requires stationary sources, for which a FEDOOP is issued, shall submit an annual compliance certification by April 15. In addition, as required by Regulation 2.17, section 5.2, the source shall submit an annual compliance report to show compliance with the permit, by March 1 of the following calendar year. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.17, section 3.5.

Regulation 2.17, section 5.2 requires testing to ensure compliance with the terms and conditions of the permit.

**b. Emission Unit U1 – Presses and Coaters**

**i. Equipment:**

<b>Emission Points</b>			
<b>P/PE</b>	<b>Capacity</b>	<b>Applicable Regulation(s)</b>	<b>Basis for Applicability</b>
E1: 4-color Komori/LS440P	15,000 sheets/hr	7.08, 7.25	Regulation 7.08 applies to each process operation that commenced operation after September 1, 1976; Regulation 7.25 applies to each process operation that commences operation after June 13, 1979
E2: 8-color Komori/LS840P	15,000 sheets/hr	7.08, 7.25	
E3: 8-color Komori/LS840P	15,000 sheets/hr	7.08, 7.25	
E5: 10-color Komori/1040P	11,500 sheets/hr	7.08, 7.25	
E6: 8-color Komori/828	11,000 sheets/hr	7.08, 7.25	
E7: Steineman UV/GLM102	8,000 sheets/hr	7.25	Regulation 7.25 applies to each process operation that commences operation after June 13, 1979
E8: Man Roland UV	5,000 sheets/hr	7.25	Regulation 7.25 applies to each process operation that commences operation after June 13, 1979

<b>Emission Points</b>			
<b>P/PE</b>	<b>Capacity</b>	<b>Applicable Regulation(s)</b>	<b>Basis for Applicability</b>
E9: Sakurai UV/SC102DX	3,100 sheets/hr	7.25	Regulation 7.25 applies to each process operation that commences operation after June 13, 1979
E10: Sakurai UV/SC102DX	3,100 sheets/hr	7.25	Regulation 7.25 applies to each process operation that commences operation after June 13, 1979

ii. **Control Devices**

<b>P/PE</b>	<b>Install Date</b>	<b>Pollutant Controlled</b>
C1: Atmospheric Evaporator	2008	VOC
C2: Baghouse	2013	PM, PM <sub>10</sub> , PM <sub>2.5</sub>

iii. **Standards/Operating Limits**

1) **VOC**

- (a) Regulation 2.17, section 5.1 allows the source to set a synthetic limit below the major source threshold. The source has a synthetic limit of less than 15 tons per year of the pollutant VOC to remain below the threshold limit for a criteria pollutant.
- (b) Regulation 7.25, section 3 determines the limits for VOC containing materials to demonstrate Best Available Control Technology (BACT).
- (c) Regulation 7.25, section 3 determines operating requirements for processes that use VOC containing materials.

2) **HAP**

Regulation 2.17, section 5.1 allows the source to set a synthetic limit below the major source threshold. The source has synthetic limits of less than 5 tons per year of any individual HAP and less than 10 tons per year of total HAPs.

3) **PM**

The emission standard for PM for the equipment in the emission unit was determined in accordance with Regulation 7.08, section 3.1.2 as follows:

$$\text{PM lb/hr limit} = 3.59 * (\text{process weight, tons/hr})^{0.62}$$

4) **Opacity**

Regulation 7.08, section 3.1.1 establishes an opacity standard of less than 20% for this equipment.

**III. Other Requirements**

1. **Temporary Sources:** The source did not request to operate any temporary facilities.
2. **Short Term Activities:** The source did not report any short term activities.
3. **Emissions Trading:** N/A
4. **Operational Flexibility:** The source did not request any operational flexibility for these emission points.
5. **Compliance Status:** There are no records of any issued enforcement actions resulting from the terms of the present or prior construction or operating permits.
6. **Calculation Methodology or Other Approved Method:**

The following equation(s) shall be used to determine VOC emissions unless other methods are approved by the District.

Off-Set Lithography Sheet-Fed Presses

$$E_{VOC} = (I_{VOC})(I_{Ret}) + (FS_{VOC}) + (BW_{VOC}) + (RW_{VOC}) + (C_{VOC}) + (CS_{VOC})(R)$$

Where,

- $E_{VOC}$  = lb VOC Emissions
- $I_{VOC}$  = lb of sheet-fed ink used  $\times$  weight % VOC in each ink
- $I_{Ret}$  = 0.050 (1 - Ink oil retention factor of 0.95 for non-heatset inks)
- $FS_{VOC}$  = Qty of fountain solution used (gallons)  $\times$  VOC content of fountain solution as applied (lb/gal)
- $BW_{VOC}$  = Qty of blanket wash used (gallons)  $\times$  VOC content of blanket wash as applied (lb/gal)
- $RW_{VOC}$  = Qty of roller wash used (gallons)  $\times$  VOC content of roller wash as applied (lb/gal)
- $C_{VOC}$  = Qty of coatings used (gallons)  $\times$  VOC content of coating as applied (lb/gal)
- $CS_{VOC}$  = Qty of each cleanup solvent used (gallons)  $\times$  VOC content as applied (lb/gal)
- $R$  = 1.0 or 0.50 (Fraction of cleanup solvent unrecovered)

An "R" factor of 0.50 (50 percent VOC credit) may be used for solvents (vapor pressure  $\leq$  5 mm Hg at 68°F) used to manually clean press components if the rags/wipes used to manually clean press components are stored in closed/sealed containers immediately after use and the company can document the quantity of solvent recovered.

7. **Permit Fee:** Permit fees are based on a FEDOOP Initial Issuance fee of \$2,542.40 in accordance the *Schedule of Fees* table for Fiscal Year 2015, pursuant to Regulation 2.08.

8. **Insignificant Activities:**

Description	Quantity	PTE (tpy)	Basis for Exemption
Indoor Baghouse	1	0.402	Regulation 1.02, Appendix A

- 1) Insignificant Activities identified in District Regulation 1.02 Appendix A may be subject to size or production rate disclosure requirements.
- 2) Insignificant Activities identified in District Regulation 1.02 Appendix A shall comply with generally applicable requirements.
- 3) Activities identified in Regulation 1.02, Appendix A, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the permit.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the pollutant Potential To Emit (PTE) quantity listed in the Insignificant Activities table, as the annual emission for each piece of equipment.
- 6) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 7) The owner or operator shall submit an updated list of Insignificant Activities whenever changes in equipment located at the facility occur that cause changes to the plant wide emissions.